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	International Application	on No.				
REQUEST						
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The undersigned requests that the present			·			
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	Applicant's or agent's f (if desired) (12 characte	tile reference ers maximum) 13	96 WO			
Box No. I TITLE OF INVENTION Thermal shock resistant casting element and m	anufacturing proce	ess thereof				
Down Mr. II Approved the second secon	n is also inventor	······································	· · · · · · · · · · · · · · · · · · ·			
Name and address: (Family name followed by given name: for a level and		Telephone No.				
The address must include postal code and name of country. The country of the Box is the applicant's State (that is, country) of residence if no State of residen		Telephone No.				
VESUVIUS CRUCIBLE COMPANY Suite 200, 103 Foulk Road		Facsimile No.				
Wilmington, DE 19803 United States of America		Teleprinter No.				
Officed States of America	-	Applicant's regis	tration No. with the Office			
State (that is, country) of nationality: US	State (that is, country)	of residence:				
This person is applicant for the purposes of: all designated the United States All designated the United States	States except th	he United States of America only	the States indicated in the Supplemental Box			
Box No. III FURTHER APPLICANT(S) AND/OR (FURTH	IER) INVENTOR(S)					
Name and address: (Family name followed by given name; for a legal entitle address must include postal code and name of country. The country of the Box is the applicant's State (that is, country) of residence if no State of residence HANSE, Eric 17 rue Henri Bosselin F - 59750 Feignies France	e address indicated in this e is indicated below.)	inventor is marked	t only t and inventor only (If this check-box d, do not fill in below.) tration No. with the Office			
State (that is, country) of nationality:						
BE	State (that is, country) of FR	of residence:				
for the purposes of: States the United Sta	ites of America of	ne United States f America only	the States indicated in the Supplemental Box			
Further applicants and/or (further) inventors are indicated or	a continuation sheet.	_				
Box No. IV AGENT OR COMMON REPRESENTATIVE;		CORRESPONDE	ENCE			
The person identified below is hereby/has been appointed to act or of the applicant(s) before the competent International Authorities a	ıs:	gent	common representative			
Name and address: (Family name followed by given name; for a legal entity The address must include postal code and name of con		Felephone No. +32 65 400	819			
DEBLED, Thierry VESUVIUS GROUP S.A.	<u> </u>	Facsimile No.				
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rue de Douvrain 17	T	Celeprinter No.				
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Belgium			on No. with the Office			
Address for correspondence: Mark this check-box where n space above is used instead to indicate a special address to w	o agent or common repre hich correspondence sho	sentative is/has bould be sent.	een appointed and the			
orm PCT/RO/101 (first sheet) (March 2001; reprint January 2003)	Sec	e Notes to the request form			

Sheet N	o 2	
Continuation of Box No. III FURTHER APPLICANT(S)	AND/OR (FURTHER	O INVENTOR(S)
If none of the following sub-boxes is used, this sheet should no		
Name and address: (Family name followed by given name; for a legal ent. The address must include postal code and name of country. The country of a Box is the applicant's State (that is, country) of residence if no State of residence DELVOYE, François 217 Avenue Jean Jaures F - 59600 Maubeuge France		This person is: applicant only applicant and inventor inventor only (If this check-box is marked, do not fill in below.) Applicant's registration No. with the Office
State (that is, country) of nationality:	State (that is, countr)	y) of residence:
This person is applicant all designated all designated for the purposes of:	d States except tates of America	the United States of America only the States indicated in the Supplemental Box
Name and address: (Family name followed by given name; for a legal entitude postal code and name of country. The country of the Box is the applicant's State (that is, country) of residence if no State of residence LAVAL, Philippe 24 rue du Bon Dieu Cauwere B - 5032 Bossière Belgium		This person is: applicant only applicant and inventor inventor only (If this check-box is marked, do not fill in below.) Applicant's registration No. with the Office
State (that is, country) of nationality: BE	State (that is, country, BE) of residence:
This person is applicant for the purposes of: all designated the United States all designated the United States	States except ates of America	the United States of America only the States indicated in the Supplemental Box
Name and address: (Family name followed by given name; for a legal entiry. The address must include postal code and name of country. The country of the Box is the applicant's State (that is, country) of residence if no State of residence is no State of the country.		This person is: applicant only applicant and inventor inventor only (If this check-box is marked, do not fill in below.) Applicant's registration No. with the Office
State (that is, country) of nationality:	State (that is, country)	of residence:
This person is applicant all designated for the purposes of:	States except tes of America	the United States the States indicated in the Supplemental Box
Name and address: (Family name followed by given name; for a legal entity. The address must include postal code and name of country. The country of the Box is the applicant's State (that is, country) of residence if no State of residence	address indicated in this is indicated below.)	This person is: applicant only applicant and inventor inventor only (If this check-box is marked, do not fill in below.) Applicant's registration No. with the Office
State (that is, country) of nationality:	State (that is, country)	of residence:
This person is applicant all designated all designated for the purposes of: States all designated the United States		he United States the States indicated in the Supplemental Box

Form PCT/RO/101 (continuation sheet) (March 2001; reprint January 2003)

Further applicants and/or (further) inventors are indicated on another continuation sheet.

See Notes to the request form.

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othe	r de	esigna	ations whi	ich wou	ld be permitte	d un	der ti	he PCT	except any	v designatio	on(s) indi	cated	in the Supplemental Box as being
exc	ude	d fron	m the scop	e of this	statement. Th	e app	olicai	nt declar	es that tho	se additions	al designa	tions	are subject to confirmation and that
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երբ	ıcal	41 11	ne expirati	ion or m	at unue nimit. (CON	jirmo	ation (inc	iuaing jees	y must reach	n ine recei	ving C	Office within the 15-month time limit.)

	S	Sheet No4		
Box No. VI PRIORIT				
The priority of the following	ng earlier application(s) is here	by claimed:	•	
Filing date	Number	Ţ - ,	Where earlier application	is: ·
of earlier application (day/month/year)	of earlier application	national application: country or Member of WTO	regional application:* regional Office	international application:
item (1) 29 March 2002 (29.03.02)	02447051.0		EP	
item (2)				
item (3)				
item (4)				
item (5)				
Further priority claims	s are indicated in the Supplement	ntal Box.		
The receiving Office is requif the earlier application was above as:	uested to prepare and transmit to siled with the Office which for to	o the International Bureau the purposes of this interna	a certified copy of the entional application is the re	arlier application(s) (only eceiving Office) identified
all items item	(1) item (2)	item (3) item	(4) item (5)	other, see Supplemental Box
* Where the earlier applicat Industrial Property or one M	tion is an ARIPO application, in Member of the World Trade Org	dicate at least one country zanization for which that e	party to the Paris Conver varlier application was file	
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Box No. VII INTERNA	TIONAL SEARCHING AUT	HORITY		
Choice of International Se international search, indicate ISA / EP	earching Authority (ISA) (if two-	vo or more International Se letter code may be used):	earching Authorities are c	competent to carry out the
Request to use results of e	arlier search; reference to th	at search (if an earlier se	anah kan hasu sawiad aw	
International Searching Auth Date (day/month/year)	hority):	_		by or requestea from the
29 March 2002 (29.03.			try (or regional Office) EP	
Box No. VIII DECLARA	TIONS			
The following declarations check-boxes below and indica	are contained in Boxes Nos. Vate in the right column the numb	/III (i) to (v) (mark the ap	pplicable	Number of declarations
Box No. VIII (i)	Declaration as to the identity		uony.	declarations
Box No. VIII (ii)	Declaration as to the applica date, to apply for and be gra	unt's entitlement, as at the unted a patent	international filing	: 1
Box No. VIII (iii)	Declaration as to the applicate, to claim the priority of	ant's entitlement, as at the fite earlier application	e international filing	: 1
Box No. VIII (iv)	Declaration of inventorship (United States of America)	(only for the purposes of t	the designation of the	: 2
Box No. VIII (v)	Declaration as to non-prejud	licial disclosures or excent	tions to lack of novelty	

Sheet No. . . 5 . .

Box No. VIII (ii) DECLARATION: ENTITLEMENT TO APPLY FOR AND BE GRANTED A PATENT

The declaration must conform to the standardized wording provided for in Section 212; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (ii). If this Box is not used, this sheet should not be included in the request.

Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate:

In relation to this international application,

VESUVIUS CRUCIBLE COMPANY is entitled to apply for and be granted a patent by virtue of the following:

an assignment from

HANSE, Eric, 17 rue Henri Bosselin, F-59750 Feignies, France, DELVOYE, François, 217 Avenue Jean Jaures, F-59600 Maubeuge, France and LAVAL, Philippe, 24 rue du Bon Dieu Cauwere, B-5032 Bossière, Belgium

to VESUVIUS CRUCIBLE COMPANY, dated January 18, 2002.

This declaration is made for the purposes of all designations, except the designation of the United States of America.

This declaration is continued on the following sheet, "Continuation of Box No. VIII (ii)".

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DOX 110. VIII (III) DECLARATION: ENTITLEMENT TO CLAIM PRIOR	x No. VIII (iii)	(iii) DECLARATION	: ENTITLEMENT TO CLAIM PRIORI
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The declaration must conform to the standardized wording provided for in Section 213; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (iii). If this Box is not used, this sheet should not be included in the request.

Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application specified below, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii)):

In relation to this international application,

VESUVIUS CRUCIBLE COMPANY is entitled to claim priority of earlier application:

No. 02447051.0

by virtue of the following:

an assignment from HANSE, Eric, DELVOYE, François and LAVAL, Philippe to VESUVIUS CRUCIBLE COMPANY, dated January 18, 2002.

This declaration is made for the purposes of all designations, except the designation of the United States of America.

This declaration is continued on the following sheet, "Continuation of Box No. VIII (iii)".

Box No. VIII (iv) DECLARATION: INVENTORSHIP (only for the purposes of the designation of the United States of America)
The declaration must conform to the following standardized wording provided for in Section 214; see Notes to Boxes Nos. VIII, VIII (i) to (v)
(in general) and the specific Notes to Box No. VIII (iv). If this Box is not used, this sheet should not be included in the request.

Declaration of inventorship (Rules 4.17(iv) and 51bis.1(a)(iv)) for the purposes of the designation of the United States of America:

tor the bar boses of the designation	of the United States of America:
I hereby declare that I believe I am the original, first and sole (if only is listed below) inventor of the subject matter which is claimed and	one inventor is listed below) or joint (if more than one inventor for which a patent is sought.
This declaration is directed to the international application of which	it forms a part (if filing declaration with application).
This declaration is directed to international application No. PCT/ to Rule 26ter).	(if furnishing declaration pursuant
I hereby declare that my residence, mailing address, and citizenship	are as stated next to my name.
I hereby state that I have reviewed and understand the contents of the of said application. I have identified in the request of said application, and I have identified below, under the heading "Prior Applications," Organization, day, month and year of filing, any application for a pater States of America, including any PCT international application design having a filing date before that of the application on which foreign p	above-identified international application, including the claims in compliance with PCT Rule 4.10, any claim to foreign priority, by application number, country or Member of the World Trade nt or inventor's certificate filed in a country other than the United ating at least one country other than the United States of America, priority is claimed.
Prior Applications: 02447051.0, EP, 29 March 2002	
••••••	
I hereby acknowledge the duty to disclose information that is a 37 C.F.R. § 1.56, including for continuation-in-part applications, mate of the prior application and the PCT international filing date of the continuation.	erial information which became available between the filing date continuation-in-part application.
I hereby declare that all statements made herein of my own knowledge are believed to be true; and further that these statements were made made are punishable by fine or imprisonment, or both, under Section false statements may jeopardize the validity of the application or any	e are true and that all statements made on information and belief with the knowledge that willful false statements and the like so 1001 of Title 18 of the United States Code and that such willful
Name: HANSE, Eric	•••••
Residence: Fiance (city and either US state, if applicable, or country)	
17 rue Henri Rossolin	
F - 59750 Feignies	
Citizenchin. Belgium	
Citizenship: Belgium Inventor's Signature: (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)	Date:
Name: DELVOYE, François	
Residence:	•••••
Mailing Address: 217 Avenue Jean Jaures	
F - 59600 Maubeuge	
Citizenship: France	
Inventor's Signature: (if not contained in the request of if declaration is corrected or added under Rule 26ter the filing of the international application. The signature must be that of the inventor, not that of the agent)	Date: MWt. Un. 19 2000 3 (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)

This declaration is continued on the following sheet, "Continuation of Box No. VIII (iv)".

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Continuation of Box No. VIII (i) to (v) DECLARATION

If the space is insufficient in any of Boxes Nos. VIII (i) to (v) to furnish all the information, including in the case where more than two inventors are to be named in Box No. VIII (iv), in such case, write "Continuation of Box No. VIII ..." (indicate the item number of the Box) and furnish the information in the same manner as required for the purposes of the Box in which the space was insufficient. If additional space is needed in respect of two or more declarations, a separate continuation box must be used for each such declaration. If this Box is not used, this sheet should not be included in the request.

n respect of two or more declarations, a separate continuation box m hould not be included in the request.	ust be used for each such declaration. If this Box is not used, this sh
Continuation of Box No. VIII (iv):	
Name: LAVAL, Philippe	
Residence: Belgium	
(city and either US state, if applicable, or country)	
Mailing Address: 24 rue du Bon Dieu Cauwere	
B - 5032 Bossière	
Inventor's Signature: (If not contained in the reguest, of if declaration is corrected or added under fully 26ter after the filling of the international application. The signature must be that of the inventor, no that of the agent)	Date: 13-03-03 (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)

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Box No. IX CHECK LIST; LANGUAGE	OF FILING	
This international application contains: (a) in paper form, the following number of sheets: request (including declaration sheets): description (excluding sequence listings and/or tables related thereto): claims:	This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item): 1. fee calculation sheet 2. original separate power of attorney 3. original general power of attorney 4. copy of general power of attorney; reference number, if any: 5. statement explaining lack of signature 6. priority document(s) identified in Box No. VI as item(s): (1). 7. translation of international application into (language): 8. separate indications concerning deposited microorganism or other biological material 9. sequence listings in computer readable form (indicate type and number of carriers) (i) copy submitted for the purposes of international search under Rule 13ter only (and not as part of the international application) (ii) (only where check-box (b)(i) or (c)(i) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Rule 13ter (iii) together with relevant statement as to the identity of the copy or copies with the sequence listings mentioned in left column 10. tables in computer readable form related to sequence listings (indicate type and number of carriers) (i) copy submitted for the purposes of international search under Section 802(b-quater) only (and not as part of the international application) (ii) (only where check-box (b)(ii) or (c)(ii) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Section 802(b-quater) only (and not as part of the international application) (iii) copy submitted for the purposes of international search under Section 802(b-quater) only (and not as part of the international application) (iii) copy submitted for the purposes of international search under Section 802(b-quater) (iiii) copy submitted for the purposes of international search under Section 802(b-quater) (iiii) copy submitted for the purpose of international s	Number of items : 1 : : : : : : : : : : : : : : : : : :
Figure of the drawings which should accompany the abstract:	Language of filing of the international application: English	
Box No. X SIGNATURE OF APPLICANT	ACENT OF COMMON PERFECTIVE	
the person signature, indicate the name of the person sign	ring and the capacity in which the person signs (if such capacity is not obvious from reading the	request).
	Thierry Debled Agent	
1. Date of actual receipt of the purported	— For receiving Office use only	
international application: 3. Corrected date of actual receipt due to later be timely received papers or drawings completing the purported international application:	2. Drawing received	
Date of timely receipt of the required corrections under PCT Article 11(2):	not rec	eived:
5. International Searching Authority (if two or more are competent): ISA /	6. Transmittal of search copy delayed until search fee is paid	
Date of receipt of the record copy	For International Bureau use only	
by the International Bureau:	·	

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